REMARKS

In response to the Office Action of November 7, 2006 and the advisory action of January 18, 2007, independent claims 1 and 12 have been amended and claim 24 has been canceled.

Claim Rejections -- 35 U.S.C. §112

Applicant has amended claims 1 and 12 to indicate that the bootstrap program "determines" memory setup data rather than "select [ing] between different external memory setup data". Support for this limitation is found at paragraphs [0045]-[0047] of the present invention which describe the operation of the bootstrap program to determine memory setup data by interrogation of a flash memory or downloading this information from a network.

Claims 1 in 12 have also been amended to indicate that the external memory may be accessed by the bootstrap program but not for the purpose of storage. Thus, the Examiner is correct that in one embodiment of the invention, external memory (albeit not the external memory whose setup data is being determined) may be accessed before determining memory set up data, to read memory set-up data.

In light of these amendments, it is believed that the objections under 35 U.S.C. §112 have now been addressed.

Claim Rejections -- 35 U.S.C. §102

The rejection of claim one in light of Fullam is respectfully traversed. Applicant agrees that generally that Fullam teaches a processing unit that executes a program to identify set-up parameters for an external memory interface. Further, during this process Fullam teaches the use of what may be an onboard memory structure (parameter memory 54). Nevertheless Applicant believes that Fullam is distinguishable from the present invention for three reasons.

First, Fullam doesn't teach an integrated processor without general purpose random access memory as is now claimed. Fullam, is silent about the existence of general purpose random access memory. Nevertheless, in a preferred embodiment, Fullam describes a system where peripheral memory device 58 and nonvolatile memory 64 are both read-only devices. A person of ordinary skill in the art would therefore understand that Fullam's execution unit 52 or some other on-board device, implicitly include at least some general purpose random access memory needed for program execution.

Second, it follows that Fullam does not teach executing a bootstrap program using

internal systems storage structures such as caches, buffers, or registers. A person of ordinary skill in the art would understand that Fullam uses conventional on-board random access memory for this purpose.

Third, Fullam does not teach execution of the bootstrap program to determine memory set-up data before being able to write to the external memory. Fullam clearly teaches that external memory is fully readable and writable using a slow-speed protocol before memory setup data is obtained.

Fullam teaches away from the innovation of the present invention by describing a system that has ready communication with external memory, which may be random access memory, and that always has implicit communication with internal random access memory. There is no suggestion of a solution to the problems of the prior art described at paragraph [0006]-[0008] of the present invention, that is, being constrained to either costly on-chip general purpose random access memory, or connecting to a limited variety of off-chip memory devices.

With respect to claims 4 and 15, Applicant respectfully traverses the suggestion that Fullam discloses a network interface and obtaining memory setup data through the network. The Examiner points to the communication with external memory 64, however external memory 64 is not attached to the execution unit 52 by a network but rather by a bus 53 and 51. Communication over a network requires the execution of a sophisticated network protocol and knowledge about network addresses not taught or suggested by Fullam.

In the Advisory Action, the Examiner suggests that Fullam teaches selecting between different external memory setup data before access to external memory 58. The claims as amended indicate that setup data must be determined before write access to any external memory. It is clear that Fullam has write access (albeit at a slow mode) to external memory 58 before the set-up parameters are determined.

In light of these comments it is believed that rejection of the claims is overcome and allowance of claims 1-23 is respectfully requested.

Respectfully submitted,

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